information including port numbers of the nodes, wherein the support system is further configured to generate topology information of the plurality of spare links based on the stored identification information and to selectively transmit the generated topology information to an origin node.

16. (Original) A system according to claim 15, wherein one of the plurality of nodes sends a message containing the identification information to a neighboring one of the plurality of nodes.

17. (Original) A system according to claim 16, wherein the message includes:

a field specifying an identification number of the one node;

a field specifying identification number of the port of the one node; and

a field indicating whether the one node is a custodial node.

18. (Original) A system according to claim 17, wherein the message further includes:

a field indicating that the message is to be continuously transmitted and exchanged along the plurality of spare links.

REMARKS

By this amendment, claims 1, 3-6, and 8-18 are pending are pending, in which claims 11 and 15 are amended. No new matter is introduced.

The Office Action mailed February 14, 2003 rejected claims 11-13, and 15-17 as obvious under 35 U.S.C. § 103 based on *Shah et al.* (US 5,646,936) in view of *Brady* (US 6,041,049),

and claims 14 and 18 as obvious under 35 U.S.C. § 103 based on *Shah et al.* in view of *Brady* and in further view of *Fischer* (US 4,941,089).

Applicants appreciate the indication that claims 1, 3-6, and 8-10 are allowed.

Applicants have amended independent claims 11 and 15, which now recite generating "topology information of the plurality of spare links based on the stored identification information."

As regards claims 11 and 15, in support of its obviousness rejection, the Office Action states that *Brady* discloses transmitting topology information to an origin node, citing FIG. 1, FIG. 5 (step 24), and col. 2, lines 48-67. Applicants respectfully disagree with this interpretation, as *Brady* does not in fact transmit topology information, as explained below.

Brady discloses (per the Abstract and the cited passage of col. 2, lines 48-67) a method that enables each node in a multi-nodal network to construct a routing table to all other nodes in the network. Each "home" or originating node performs a method which includes the steps of: transmitting a query to all immediate neighbor nodes and recording in a routing table, responses received which identify the neighbor node at the terminus of each link; transferring to each neighbor node, home node routing table entries and receiving routing table entries from each neighbor node. In addition, FIG. 5, step 24 refers to the step of "transmit home node route table entries to all neighbor nodes and receive same from neighbor nodes."

Upon close examination of the reference of *Brady*, including the cited passages, it is apparent that *Brady* never transmits "topology information" as claimed, but merely transmits routing table entries that identify a neighboring node. The responses received from the immediate neighbor nodes based upon associated queries provide physical node identifiers (col. 3, lines 56-58). By contrast, the claimed topology information is "based on the stored identification information"; this identification information includes "port numbers of the nodes."

The physical node identifiers used by the *Brady* system cannot include "port numbers of the nodes."

Based on the foregoing, it is clear that *Brady* fails to disclose transmitting topology information in the manner claimed, and thus, the combination of *Shah et al.* and *Brady* cannot satisfy the features of independent claims 11 and 15.

Furthermore, the Office Action acknowledges, on page 2, item 1, that the combination of *Shah et al.* and *Brady* fails to disclose identifying port numbers, and conveniently draws the conclusion that "one skilled in the art would recognize that a cross-connect switch typically has port numbers identifying connections to different working paths and spare paths." To the extent that the Office Action is taking Official Notice, pursuant to the MPEP § 2144.03, Applicants respectfully traverse the Official Notice and request the Examiner to produce references showing the claim features or withdraw the rejection as factually inadequate. Also, although the Examiner may in some instances take Official Notice of certain facts to fill in the gaps, such facts should not comprise the principle evidence upon which a rejection is based. See ***In re Ahlert***, 424 F.2d 1088, 1091, 165 USPQ 418, 420-421 (CCPA 1970). Further, the conclusion that "a cross-connect switch typically has port numbers identifying connections to different working paths and spare paths" is insufficient as a matter of law, because such conclusory statements, premised on "common knowledge and common sense," fail to fulfill requirements of the Administrative Procedure Act, ***In Re Sang Su Lee***, No. 00-1158 (Fed. Cir. Jan. 18, 2002), and that deficiencies of the cited references cannot be remedied by general conclusions about what is "basic knowledge" or "common sense." ***In Re Zurko***, 258 F.3d at 1385, 59 USPQ2d at 1697.

With respect to claims 14 and 18, the Office Action applies the further reference of *Fischer* to fill in the gaps of *Shah et al.* and *Brady*; *Fischer* is relied upon for a supposed disclosure of a message type field indicating a continuously exchanged keep-alive packet.

Fischer, which is drawn to the input/output of a computer system, does not cure the deficiencies of the *Shah et al.* and *Brady*, such as the transmission of topology information.

Accordingly, Applicants respectfully urge the withdrawal of the obviousness rejections, and request that claims 11-18 be indicated as allowable.

Therefore, the present application, as amended, overcomes the rejections of record and is in condition for allowance. Favorable consideration is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at (703) 425-8508 so that such issues may be resolved as expeditiously as possible.

Respectfully Submitted,

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5/12/03
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APPENDIX

11. (Currently Amended) A method for providing network restoration, the method comprising:

centrally storing identification information of a plurality of spare links interconnecting a plurality of nodes, the identification information including port numbers of the nodes;

generating topology information of the plurality of spare links based on the stored identification information; and

transmitting the generated topology information to an origin node.

15. (Currently Amended) A system for providing network restoration, the system comprising:

a plurality of nodes interconnected by a plurality of spare links; and

a support system communicating with the plurality of nodes, the support system configured to [a] store identification information of the plurality of nodes, the identification information including port numbers of the nodes, wherein the support system is further configured to generate topology information of the plurality of spare links based on the stored identification information and to selectively transmit the generated topology information to an origin node.